

Title (en)

Method for magnetic-inductive measurement of fluid flow and magnetic-inductive flowmeter

Title (de)

Magnetisch-induktives Durchflussmessverfahren und magnetisch-induktives Durchflussmessgerät

Title (fr)

Procédé pour la mesure magnéto-inductive d'un débit et débitmètre magnéto-inductif

Publication

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Application

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Priority

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Abstract (en)

[origin: US2005229714A1] A magnetoinductive flow measuring method serves to measure the flow rate of a medium traveling through a measuring tube, while with the aid of at least one field coil a magnetic field is generated with a magnetic field component that extends in a direction perpendicular to the axis of the measuring tube. The electrical resistance of the field coil is measured and the temperature of the field coil, constituting a first temperature, is calculated based on the measured resistance of the field coil. A temperature measurement, constituting the second temperature, is taken at a location other than that of the field coil and the temperature of the flowing medium is calculated on the basis of the first and second temperatures. This provides the user of the flow measuring method an added benefit in that it gives the possibility, in simple fashion, to determine the temperature of the flowing medium. A flowmeter for measuring flow according to the method is also disclosed.

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